INCH-POUND
MIL-PRF-32159/13
1 July 2004

PERFORMANCE SPECIFICATION

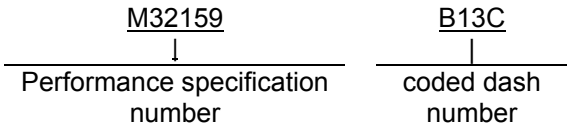
RESISTORS, FIXED, FILM, CHIP, ZERO OHM, INDUSTRIAL,
HIGH RELIABILITY, SPACE LEVEL, STYLE RCZ0302

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the requirements for style RCZ0302, fixed, film, chip, zero ohm, industrial, high reliability, space level resistors. This style is available in all termination materials.

1.2 Part or Identifying Number (PIN). Chip resistors covered by this specification are identified by a PIN which consists of the basic number of this specification and a coded dash number. The PIN is in the following form:



The coded dash number must be derived in accordance with MIL-PRF-32159.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

Comments, suggestions, or questions on this document should be addressed to Defense Supply Center Columbus, ATTN: DSCC-VAT, Post Office Box 3990, Columbus, OH 43218-3990, or emailed to Resistor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at www.dodssp.daps.mil.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

DEPARTMENT OF DEFENSE SPECIFICATION

MIL-PRF-32159 - Resistors, Chip, Fixed, Film, Zero Ohm, Industrial, High Reliability, Space Level, General Specification for.

(Copies of these documents are available online at http://assist.daps.dla.mil/quicksearch/ or www.dodssp.daps.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 General. The requirements for acquiring the product described herein shall consist of this document and MIL-PRF-32159.

3.2 Interface and physical dimensions. Resistors shall meet the interface and physical dimensions specified on figure 1, as applicable.

3.3. Power rating. The power rating shall be 0.035 watts.

3.4 Current rating (by termination). The maximum current rating shall be 1.1 amps for terminations B/G/W, 0.76 amps for termination styles C/D, and 0.48 amps for termination styles U/T.

3.5 Resistance (by termination). Maximum resistance value shall be 0.030 ohms for termination styles B/G/W, 0.060 ohms for termination styles C/D, and 0.150 ohms for termination styles U/T.

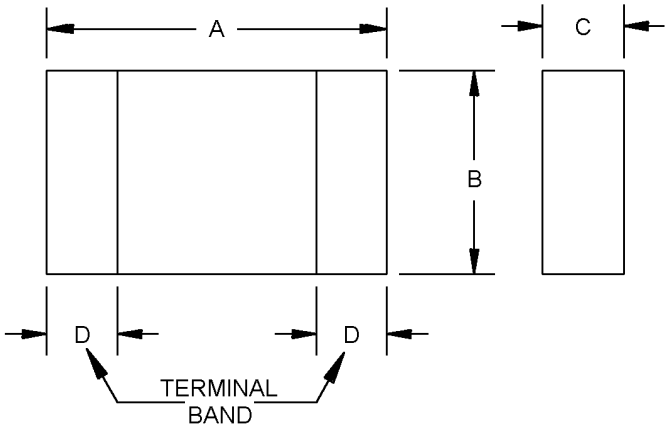
4. VERIFICATION

4.1 Verification. Verification shall be in accordance with MIL-PRF-32159.

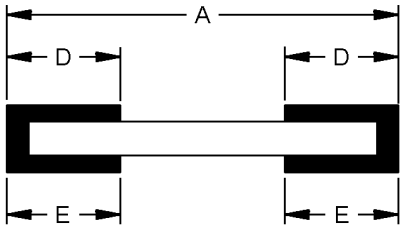
5. PACKAGING

5.1 Packaging. For acquisition purposes the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

CONFIGURATION A



CONFIGURATION B



Inches	mm	Inches	mm
0.004	0.10	0.022	0.56
0.005	0.13	0.025	0.64
0.007	0.18	0.032	0.81
0.008	0.20	0.034	0.86
0.010	0.25		

Configuration	Dimension A Inch	Dimension B Inch	Dimension C Inch	Dimension D Inch	Dimension E inch
A	0.032 ±0.004	0.022 ±0.005	0.010 / 0.025	0.008 ±0.005	N/A
B	0.034 ±0.004	0.022 ±0.005	0.010 / 0.025	0.007 ±0.005	0.008 ±0.005

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. The pictorial view of the styles above are given as representative of the envelope of the item. Slight deviations from the outline shown, which are contained within the envelope, and do not alter the functional aspects of the device are acceptable.
5. Configuration A covers termination materials D, T, and W.
6. Configuration B covers termination materials B, C, G, and U.

FIGURE 1. Style RCZ0302.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. Chip resistors are intended to be use in thin or thick film hybrid circuits where micro-circuitry is indicated and in surface mount applications.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, date of this specification, the applicable associated specification, and the complete PIN (see 1.2).

b. If not otherwise specified (see 2.1), the versions of the individual documents referenced will be those in effect on the date of release of the solicitation.

c. Packaging requirements (see 5.1).

d. If marking is required (see MIL-PRF-32159).

6.3 Tolerance for wraparound termination. The added tolerance for the wraparound type termination is intended to apply only to termination, metallization, and pretinning material.

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA – CC

Preparing activity:
DLA - CC

(Project 5905-1997-13)

Review activities:
Army - AR, AT, AV, CR4
Navy - AS, CG, MC, OS
Air Force - 19, 99

Civil agencies:
NASA – NA

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.